

10. (New) A method of cementing an oil well or the like, comprising:

a) forming a cement slurry comprising:

i) cement;

ii) a surfactant; and

5 iii) water;

b) foaming the slurry by introduction of gas; and

c) injecting the slurry into the well and allowing it to set;

characterized in that the water content of the slurry is less than 50% by volume before foaming.

11. (New) A method as claimed in claim 10, comprising forming a cement slurry having a water content of 33% to 45% by volume before foaming.

12. (New) A method as claimed in claim 10 or 11, wherein the step of forming the slurry comprises providing a solid fraction is constituted by

a) 35% to 65% by volume particles with an average diameter in the range 200 μm to 600 μm ,

b) 20% to 45% by volume Portland cement, and

5 c) 5% to 25% by volume particles with an average diameter in the range 0.5 μm to 5 μm

13. (New) A method as claimed in claim 12, comprising introducing gas to the slurry such that the foaming quality is in the range 30% to 65%

14. (New) A method as claimed in claim 12, comprising including in the slurry one or more additives of the following types: a dispersing agent, an antigelling agent, a water retainer, a cement setting accelerator or retarder, or a de-foaming stabilizer.

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15. (New) A method of cementing an oil well or the like, comprising:

a) forming a slurry comprising:

i) a micro-cement having a maximum particle size in the range 6 μm to 12 μm , with a mean particle diameter of a few microns, and a specific surface area per unit weight, determined by the air permeability test [Blaine Fineness] of more than 0.6 m^2/g ;

ii) a surfactant; and

iii) water;

b) foaming the slurry by introduction of a gas; and

c) injecting the slurry into the well and allowing it to set;

characterized in that the water content of the slurry before foaming is less than 72% by volume.

16. (New) A method as claimed in claim 15, comprising forming a slurry having a water content before foaming in the range 58% to 70% by volume.

17. (New) A method as claimed in claim 15 or 16, comprising forming a slurry having a solid fraction of 50% to 75% by volume micro-cement, 15% to 40% by volume particles with an average diameter in the range 0.05 micrometers to 0.5 micrometers, and 0 to 20% by volume particles with an average dimension in the range 3 nanometers to 60 nanometers.

18. (New) A method as claimed in claim 17, comprising introducing gas to the slurry such that the foaming quality is in the range 30% to 65%

19. (New) A method as claimed in claim 17, comprising including in the slurry one or more additives of the following types: a dispersing agent, an antigelling agent, a water retainer, a cement setting accelerator or retarder, or a de-foaming stabilizer.